

Notulae to the Italian alien vascular flora: 17

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Abstract

In this contribution, new data concerning the distribution of vascular flora alien to Italy are presented. It includes new records and status changes from casual to naturalized for Italy or for Italian administrative regions for taxa in the genera *Callianthe*, *Chamaecyparis*, *Chamaeiris*, *Cotoneaster*, *Erigeron*, *Freesia*, *Hemerocallis*, *Juglans*, *Kalanchoë*, *Ludwigia*, *Nassella*, *Paulownia*, *Physocarpus*, *Pistia*, *Saccharum*, *Setaria*, and *Vachellia*. Nomenclatural and distribution updates, published elsewhere, and corrections are provided as supplementary material.

Keywords

Alien species, floristic data, Italy, nomenclature

How to contribute

The text for the new records, status changes from casual to naturalized or invasive, exclusions, and confirmations should be submitted electronically to Lorenzo Lastrucci (lorenzo.lastrucci@unifi.it). The corresponding specimen along with its scan or photograph has to be sent to FI Herbarium: Museo di Storia Naturale (Botanica), Sistema Museale di Ateneo, Via G. La Pira 4, 50121 Firenze (Italy). Those texts concerning nomenclatural novelties and typifications (only for accepted names) should be submitted electronically to Gabriele Galasso (gabriele.galasso@comune.milano.it). Each text should be within 1,000 characters (spaces included).

Floristic records

Callianthe picta (Gillies ex Hook. & Arn.) Donnell (Malvaceae)

+ (NAT) **ITALIA (SAR)**: Alghero (Sassari), Santa Maria La Palma, strada SP55bis (WGS84: 40.658894°N, 8.273345°E), vegetazione antropogenica, 28 m, 12 January 2024, *F. Mascia*, *A. Maccioni* (FI, SS). – Naturalized alien species new for the flora of Italy (Sardegna).

This species is native to north-eastern Argentina, southern Brazil, Paraguay and Uruguay (POWO 2024a [onwards]); the plants were identified according to Tang et al. (2007), Donnell et al. (2012), and Takeuchi (2024 [onwards]). A dozen adults and a large number of seedlings were recorded in a roadside ditch.

A. Maccioni, F. Mascia

***Chamaecyparis lawsoniana* (A.Murray) Parl. (Cupressaceae)**

+ (NAT) **ITALIA (PIE)**: Alto (Cuneo), nei pressi del cimitero (WGS84: 44.107883°N, 8.000641°E), margine di un bosco di latifoglie in prossimità di un impluvio fresco, 631 m, 30 November 2023, *M. Lonati, D. Barberis* (FI). – Status change from casual to naturalized alien for the flora of Italy (Piemonte).

This species was first recorded as a casual alien in Piemonte by Galasso et al. (2022). The observed individuals derived from seeds of mature plants used as ornamentals in the nearby cemetery. Presently, they form an uneven-aged woody patch, with many plants, from 5 to 7 m tall, regularly fruiting. Dozens of seedlings grow in the area, potentially leading to a further expansion of the population.

M. Lonati, D. Barberis

***Chamaeiris orientalis* (Mill.) M.B.Crespo (Iridaceae)**

+ (NAT) **SAR**: Stintino (Sassari), Pischina Salidda (WGS84: 40.927490°N, 8.226195°E), area di ristagno temporaneo d'acqua, 1 m, 25 June 2023, *M. Fois, A. Cuenca-Lombrana* (FI, CAG). – Naturalized alien species new for the flora of Sardegna.

This species has probably been cultivated for its aesthetic value and appears to be able to disperse and reproduce without human intervention. A dense stand with nearly one hundred flowering individuals was found in Stintino, probably established after hydrochorous dispersal. Other smaller stands are scattered in canals and ditches in the countryside around Sassari.

M. Fois, A. Cuenca-Lombrana

***Cotoneaster pannosus* Franch. (Rosaceae)**

+ (NAT) **VEN**: Verona (Verona), aree agricole a N dell'Interporto Quadrante Europa (WGS84: 45.428677°N, 10.934232°E), spontanea in filare alberato al limitare di campi agricoli coltivati, 75 m, 20 June 2023, leg. *D. Fontana, J. Bettin*, det. *D. Fontana, A. Giacò* (FI). – Naturalized alien species new for the flora of Veneto.

The population consists of few individuals scattered in a hedgerow near cropped fields. Since the shrubs show distinct sizes, one can assume that they originated through dispersion from the plants in the hedgerow. As an additional proof of sexual reproduction, at the time of collection most of the plants were flowering and fruiting.

D. Fontana, A. Giacò

***Erigeron karvinskianus* DC. (Asteraceae)**

+ (NAT) **MOL**: Campobasso (Campobasso), Stazione Centrale dei treni (WGS84: 41.5576343°N, 14.6630261°E), muro in cemento del parcheggio della stazione, 685 m, SE, 31 October 2023, leg. *M. Varricchione*, det. *D. Ciaramella* (FI). – Naturalized alien species new for the flora of Molise.

Dozens of individuals of the species grow spontaneously in the gaps between limestone blocks of the SE-facing retaining wall, spanning an area of approximately 500 m² along with *Dittrichia viscosa* (L.) Greuter subsp. *viscosa*, *Ficus carica* L., *Parietaria judaica* L., and *Verbena officinalis* L. The potential expansion of this species in other parts of the city should be monitored carefully.

D. Ciaramella, M. Varricchione

***Freesia leichtlinii* Klatt subsp. *alba* (G.L.Mey.) J.C.Manning & Goldblatt (Iridaceae)**

+ (NAT) **ABR**: Chieti (Chieti), cimitero locale (WGS84: 42.352755°N, 14.185811°E), margine di un percorso pedonale regolarmente sfalcato, 262 m, 12 April 2022, A. Pica, J. Lupoletti (FI). – Status change from casual to naturalized alien for the flora of Abruzzo.

In Abruzzo, this species was first reported as a casual alien by Galasso et al. (2018). Several individuals, currently in expansion, grow as naturalized in the local cemetery covering an area of about 10 m². According to Buldrini et al. (2023), cemeteries often host alien species and could potentially spread from there to the surrounding area.

A. Pica, J. Lupoletti

***Hemerocallis fulva* (L.) L. (Asphodelaceae)**

+ (NAT) **CAM**: Roccamonfina (Caserta), loc. Pepini, strada SP90 (WGS84: 41.300953°N, 14.001941°E), margini stradali nel castagneto, 600 m, 23 June 2020, A. Croce (FI, NAP barcode NAP0003033). – Status change from casual to naturalized alien for the flora of Campania.

In Campania, this neophyte was first reported a long time ago (Terracciano 1890) and, since then, it has been observed in several localities (Del Guacchio and La Valva 2017). The species is expanding since several years in Roccamonfina and Sessa Aurunca (Caserta) (WGS84: 41.266033°N, 13.976723°E), about 4 km away from each other.

A. Croce, E. Del Guacchio

***Juglans nigra* L. (Juglandaceae)**

+ (NAT) **SAR**: Domusnovas (Sud Sardegna), Oridda, naturalizzata lungo l'asta fluviale del Rio Oridda (WGS84: 39.406420°N, 8.620684°E), bosco di impluvio, 580 m, 16 August 2023, G. Bacchetta, L. Podda (FI, CAG). – Naturalized alien species new for the flora of Sardegna.

Several adult individuals at different growth stages, including seedlings, were found in the Oridda valley along the river at an impluvium with high soil moisture, occupying an area of approximately 200 m². *Juglans nigra* was found in an area where experiments on the introduction of alien species (Pavari and de Philippis 1941) and, subsequently, reforestation and afforestation activities by the Regional Forest Agency were carried out.

G. Bacchetta, L. Podda

***Kalanchoë ×houghtonii* D.B.Ward (Crassulaceae)**

+ (NAT) **MOL**: Termoli (Campobasso), area industriale presso il Fiume Biferno, sull'ex piazzale cementato nel complesso industriale abbandonato (WGS84: 41.957403°N, 15.023689°E), piazzale cementato abbandonato, 5 m, 14 November 2022, leg. *D. Fontana, J. Bettin*, det. *D. Fontana, J. Franzoni* (FI). – Naturalized alien nothospecies new for the flora of Molise.

The population is particularly abundant in an abandoned industrial area, where it grows in a concrete-covered area.

D. Fontana, J. Franzoni

***Ludwigia hexapetala* (Hook. & Arn.) Zardini, H.Y.Gu & P.H.Raven (Onagraceae)**

+ (NAT) **TOS**: Carrara (Massa-Carrara), fraz. Marina di Carrara, Canale Fossa Maestra (WGS84: 44.045912°N, 10.020584°E), sponda canale, 1 m, 13 September 2023, *L. Pinzani, E. Pelella, D. Di Lernia, F. Mariani, S. Ceschin* (FI, URT). – Naturalized alien species new for the flora of Toscana.

Ludwigia hexapetala was found in extensive populations, both in water and along the banks, covering a large stretch of the canal. This invasive alien species of European Union concern, listed in Regulation (EU) 1143/2014, is currently invading many Italian waterbodies, where it negatively affects water quality and impacts native plant communities (Pelella et al. 2023b), becoming a threat to the more vulnerable species (Pelella et al. 2023a).

L. Pinzani, E. Pelella

***Nassella tenuissima* (Trin.) Barkworth (Poaceae)**

+ (NAT) **ITALIA (LAZ)**: Viterbo (Viterbo), Via A. Cerasa (WGS84: 42.427550°N, 12.095200°E), sidewalk curb joint, 170 m, 2 May 2023, *L. Cancellieri* (FI). – Status change from casual to naturalized alien for the flora of Italy; naturalized alien species new for the flora of Lazio.

Several individuals of multiple generations grow in the trenches of trees lining the street and in the joints of the sidewalk curbs. The plants reproduce autonomously, producing seeds that gradually colonize other, more distant, portions of the pavement.

L. Cancellieri

***Paulownia tomentosa* (Thunb.) Steud. (Paulowniaceae)**

+ (NAT) **CAL**: Molochio (Reggio Calabria), loc. Morgane, Vallone Acquafredda (WGS84: 38.296262°N, 16.025038°E), bosco ripariale a *Salix alba* e *Populus alba*, 358 m, 6 November 2023, leg. *A. Morabito*, det. *A. Morabito, C.M. Musarella* (FI). – Naturalized alien species new for the flora of Calabria.

We observed several flowering and fruiting individuals.

A. Morabito, C.M. Musarella

***Physocarpus opulifolius* (L.) Maxim. (Rosaceae)**

+ (NAT) **TAA:** Merano (Bolzano), fraz. Sinigo, Rio Valsura presso la zona industriale e artigianale di Sinigo (WGS84: 46.625929°N, 11.177888°E), vegetazione delle aree ripariali periodicamente sommerse, 278 m, 13 October 2023, leg. *G. Mei*, det. *G. Mei*, *A. Stinca* (FI, *Herb. G. Mei*); Terlano (Bolzano), fraz. Vilpiano, confluenza tra il Rio Vilpiano e il Fiume Adige (WGS84: 46.550767°N, 11.222301°E), vegetazione ripariale periodicamente sommersa e fortemente alterata, 254 m, 25 October 2023, leg. *G. Mei*, det. *G. Mei*, *A. Stinca* (*Herb. G. Mei*). – Naturalized alien species new for the flora of Trentino-Alto Adige.

The presence of a population with about 15 individuals at different stages of development, including a fair number of seedlings, in the periodically submerged areas of the Rio Valsura and some individuals of different ages in other localities downstream (e.g., WGS84: 46.603991°N, 11.184034°E, and 46.617427°N, 11.184161°E), suggests the established presence in Trentino-Alto Adige of *Physocarpus opulifolius*. In this region, this species is capable of propagating autonomously by seeds.

G. Mei, A. Stinca

***Pistia stratiotes* L. (Araceae)**

+ (NAT) **LAZ:** Roma (Roma), Villa Doria Pamphilj, canale tra l'ingresso alla villa in Via della Nocetta 30 ed il Giardino dei Giusti dell'Umanità di Roma (WGS84: 41.881634°N, 12.437535°E), canale, trovati circa 50 individui, sito molto disturbato, 50 m, 7 August 2023, *D. Di Lernia*, *S. Ceschin* (FI). – Status change from casual to naturalized alien for the flora of Lazio.

The invasive alien aquatic species of European Union concern, listed in Regulation (EU) 1143/2014 from August 2, 2024, *Pistia stratiotes*, was recently recorded in Lazio as a casual alien (Roma-Marzio et al. 2023). The finding site is located inside a very disturbed canal running through a public park. In summer, about 20 individuals of the species were found along this canal, whose numbers have more than doubled in a few months to form a rich population accompanied mainly by *Lemna minor* L. and, secondarily, by *Helosciadium nodiflorum* (L.) W.D.J.Koch subsp. *nodiflorum* and *Veronica anagallis-aquatica* L. subsp. *anagallis-aquatica*.

D. Di Lernia, S. Ceschin

***Saccharum biflorum* Forssk. (Poaceae)**

+ (NAT) **SAR:** Villasor (Sud Sardegna), loc. Acquacotta (WGS84: 39.403490°N, 8.848590°E), terreni umidi disturbati, 56 m, 13 January 2009, *F. Mascia* (CAG); Capoterra (Cagliari), loc. Tanca di Nissa (WGS84: 39.168813°N, 9.008524°E), agrumeti abbandonati, 3 m, 8 April 2013, *F. Mascia* (CAG); Elmas (Cagliari), Strada rurale Sa Bruvurera (WGS84: 39.28312°N, 9.02907°E), margini stradali lungo campi abbandonati, 12 m, 26 January 2024, *A. Lallai*, *F. Mascia* (FI, CAG). – Status change from undefined to naturalized alien for the flora of Sardegna.

According to local people from Assemini (Cagliari), *Saccharum biflorum* was introduced by farmers in the second half of the 1960s, to form hedges protecting crops. In cultivation the species reproduces clonally, but its dispersal on the island can be attributed to its ability to vegetatively and sexually reproduce, as demonstrated in other areas where it occurs as an alien (Bonnett et al. 2014; Guarino et al. 2023). Accordingly, this species is considered naturalized for Sardegna.

A. Lallai, F. Mascia

***Setaria italica* (L.) P.Beauv. subsp. *pycnocomma* (Steud.) de Wet (Poaceae)**

+ (NAT) **TAA:** Avio (Trento), Pieve di Avio (WGS84: 45.732745°N, 10.928641°E), vegetazione prativa della scarpata stradale e dei campi limitrofi, 182 m, 11 August 2023, leg. G. Mei, E. Grande, det. G. Mei, A. Stinca (FI). – Status change from casual to naturalized alien for the flora of Trentino-Alto Adige.

Populations of this subspecies are widespread along roadsides, in peri-urban prairies and between rows of vineyards also in other localities (e.g.: Avio [Trento], loc. Ai Prati [WGS84: 45.733901°N, 10.942455°E], 12 August 2023, G. Mei, E. Grande, A. Stinca; Sabbionara [Trento], loc. Sant'Antonio [WGS84: 45.743398°N, 10.949965°E], 12 August 2023, G. Mei, E. Grande, A. Stinca; Ora-Auer [Bolzano], loc. San Floriano [WGS84: 46.395229°N, 11.312820°E], 19 September 2023, G. Mei, E. Grande, A. Stinca). Accordingly, this taxon is considered naturalized in Trentino-Alto Adige.

G. Mei, A. Stinca

***Vachellia farnesiana* (L.) Wight & Arn. (Fabaceae)**

+ (NAT) **ITALIA (CAL):** Brancaleone (Reggio Calabria), loc. Brancaleone Superiore (WGS84: 37.971633°N, 16.084061°E), praterie steppiche ad *Ampelodesmos mauritanicus* e *Hyparrhenia hirta*, 161 m, 23 May 2021, V.L.A. Laface, C.M. Musarella (FI, REGGIO). – Status change from casual to naturalized alien for the flora of Italy (Calabria).

In Calabria, *Vachellia farnesiana* was reported as a casual alien since 2019 (Galasso et al. 2019). It forms dense, impenetrable fertile populations that occupy steppe grasslands with *Ampelodesmos mauritanicus* (Poir.) T.Durand & Schinz and *Hyparrhenia hirta* (L.) Stapf (Habitat 6220* according to Directive 92/43/EEC).

V.L.A. Laface, C.M. Musarella

Nomenclatural and distribution updates from other literature sources

Nomenclatural, status, and distribution updates according to Lucchese (2017), Bonali (2020), Gariboldi (2021), Ciaschetti and Di Cecco (2023), Martini et al. (2023), Iamónico and Nicoletta (2024), Iamónico et al. (2024), Klak et al. (2024), Lonati et al. (2024), Musarella et al. (2024), Patti et al. (2024), POWO (2024b [onwards], 2024c

[onwards], 2024d [onwards]), Roma-Marzio et al. (2024), and Ruggero et al. (2024) and corrections according to Galasso et al. (2024), are provided in Suppl. material 1.

G. Galasso, F. Bartolucci

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Supplementary material I

Supplementary data

Authors: Gabriele Galasso, Fabrizio Bartolucci

Data type: pdf

Explanation note: 1. Nomenclatural updates; 2. Note updates; 3. Distribution updates; 4. Synonyms, misapplied or included names.

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